Softron Media Services

OnTheAir Video Express

User Manual

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Welcome to OnTheAir Video Express

Remarks

In this manual, pop-up menus will be indicated as: File > Save As. The word “File” before the sign “>” indicates the menu from the menu bar. The information after the “>” sign is a command that you can choose within the menu.

You can visit our web site www.softron.tv for information about updates as well as to contact us for support.

In the first part of this manual, we will briefly introduce you to OnTheAir Video Express. You will learn about the different configurations and how to install and launch the software.

About OnTheAir Video Express

1

1.1 Some quick facts

OnTheAir Video Express (OTAVE) is an OS X application that allows you to output and broadcast a wide variety of media and file formats from video cards, HDMI and DVI outputs. It can be used by television stations, large or small, networks or closed circuits, as a video player for news or live television programming or for presentations in entertainment and educational environments, live performances, shows, exhibitions, trade shows, information kiosks, etc. Its use is only limited by the imagination.

Simplicity

The OnTheAir Video Express User Interface has been designed for the video professional and beginning user alike. The clean and easy to use interface is key to the success of OnTheAir Video Express.

Flexibility

OnTheAir Video Express is also very flexible, it supports multiple formats in both SD and HD. None of the Codecs supported are proprietary, which means it integrates easily with past, present and future systems. A Quick export from Final Cut Pro allows your product to be aired, no need to reformat, compress or convert it.

OnTheAir Video Express does not require any proprietary hardware. A new PowerMac or MacPro and a DVI, HDMI or a compatible Video Card are all you need to start using the application. For higher capacity needs, you will need a Fibre Channel RAID server (Apple Xserve Raid for example) or an Xsan.

Because the playlists from OnTheAir Video Express are in XML format they can be easily integrated into traffic or automation systems.

Security

OnTheAir Video Express is based on a Macintosh/Unix architecture which is known for its reliability and flexibility. All solutions developed by Softron Media Services are fully tested and approved before released.

Prompt and personalized support is also what we do best.

▶ 1.2 Get Support - Additional Information

If this document doesn't bring you enough information, our website have additional and/or updated information available.

Visit the OnTheAir Video Express product page to check for **specifications**, codec and video card supported, etc:
http://www.softron.tv/products/playout_standalone/ontheair_video_express.html

Then if you require more information and support, you can also visit the **Knowledge Base** here:
http://softron.zendesk.com/categories/4590-playout

And if you didn't find any answer to your questions, you can still submit a **support ticket** here:
http://softron.zendesk.com/anonymous_requests/new

System Requirements

2

2.1 Computer Requirements

OnTheAir Video Express requires :

- Any Mac Based Intel Computer.
- Minimum *4 GB RAM*.
- Mac OS X version 10.5.8 or later
- One or more video outputs such as:
  - A Compatible video card: AJA, Blackmagic Design, Matrox, MOTU,...
  - A FireWire converter: Canopus, ..
  - A built-in HDMI port of the 2010 Mac mini
  - A built-in Monitor in your MacBook, MacBook Pro, iMac.
  - A DVI or a Mini Display Port

2.2 Video /Audio output

OnTheAir Video Express can output to just about any audio/video output that is recognized by QuickTime, To know more about supported video cards, simply visit our website specifications page http://www.softron.tv/products/playout_specs.html.

Some card manufacturers support more than one card installed in a single system (AJA since drivers 7.5, and Black Magic Designs since drivers 5.8). This enables you to have multiple outputs on a single Mac. We currently do not recommend a multiple output configuration with OnTheAir Video Express, suitable applications for multiple output are OnTheAir Video or OnTheAir Node.

Additionaly to outputing to a video card, you can also output to the built-in DVI / Mini DisplayPort / HDMI output of your Mac.

OnTheAir Video Express can play out interlaced movies to PCI cards such as the those from AJA, Blackmagic-Design, Matrox or MOTU. However, due to a limitation in QuickTime, you should not output interlaced movies to the HDMI, DVI or Mini DisplayPort of your Mac as you may experience some random field inversion, sometimes it will work, but sometimes it will not. When outputting video from the HDMI, DVI or Mini DisplayPort output, we recommend that you use only progressive content.

2.3 Storage

You can use any external or internal hard drive or storage device with OnTheAir Video Express. It is important to check the devices data read rate to ensure that it is fast enough to handle the files you intend to use.

If you are working with over 1000 files or with Uncompressed High Definition files, we recommend a Fibre Channel storage system from a third party supplier.

2.4 Supported Codecs - File format

OnTheAir Video Express can output any file that QuickTime can read, this means you can play movie files, still images, audio files, and motion graphics in a variety of different formats and Codecs. The general assumption is that if you can open the file with QuickTime, you'll be able to output it with OnTheAir Video Express.

To expand the capabilities of OnTheAir Video Express you can add QuickTime components e.g. MPEG, IMX, Perian, flash, Avid, etc. To enable more formats in QuickTime there is more information available at http://www.apple.com/quickTime/extending/. We test most components available however, we can not guarantee support of all QuickTime Components, as manufacturers vary in standards and in protocols. If you are using a specific codec or file format, make sure to run tests to determine if the component performs adequately.

2.5 Playing Still images

OnTheAir Video Express can play any still image and graphic that is compatible with QuickTime. You can set the default duration of still images and also modify the duration of individual files in the playlist.

2.6 About File Wrappers (QuickTime, AVI, MXF)

OnTheAir Video Express supports .mov QuickTime wrappers and .avi without the need of additional software or plug-ins.

OnTheAir Video Express supports MXF files and .flv with the appropriate QuickTime component. You can purchase such component to read MXF files from MXF4Mac or Calibrated or from Adobe for FLV files.

▶ 2.7 About VANC

Additional information can be encoded in video lines (VANC) e.g. Closed Captioning in the USA or Teletext in Europe. OnTheAir Video Express does not read or write into the VANC lines it acts as a pass through for this information thus allowing the video card to process it accordingly. Closed Captioning and Teletext functionality is entirely dependent on the functionality and features of the video card and is not blocked in any way by OnTheAir Video Express. VANC is not compatible with Mac System HDMI or DVI outputs.

▶ 2.8 Closed Captioning with OnTheAir Video Express

Closed Captioning is used widely in many countries including the United States of America. Captioning information is encoded on to special lines in the Video Signal.

It is also possible to add Captioning signals to your video output with the following additional components:

- Captioning and Encoding Software that enables encoding to an audio track during post-production.
- A video card that will decode the audio track and encode Captioning to the video signal when so it can be read by all TV monitors.

One solution to encode Captioning information to Audio is Mac Caption. (http://www.cpcweb.com). Mac Caption can import existing caption files (or create new captions from scratch), and exports a true 708 caption track to ensure the video is compliant with all FCC regulations (supports all EIA-708 features).

Installing & Setting up

II

In this second part, we will explain how to install and set up the OnTheAir Video Express preferences.

Please read this section carefully. Not only will it provide valuable information on how to set up your hardware and software correctly, but also because much of the information provided will be helpful in your every day use of OnTheAir Video Express.

Installing and licensing

3

3.1 Installing OnTheAir Video Express

- Download the latest version of OnTheAir Video Express from the http://www.softronmedia.com . Double click on the compressed file to unzip it.
- Drag the OnTheAir Video Express icon into the Applications folder on your Mac.
- Double click on the OnTheAir Video Express icon or select the icon in the Applications folder and use your File>Open command to launch the application.
- When prompted with the message that “OnTheAir Video Express.app” is an application downloaded from the Internet. Are you sure you want to open it? Click on Open.
- An empty (blank) OnTheAir Video Express Playlist will open.

3.2 Using OnTheAir Video Express in DEMO mode

OnTheAir Video Express can be used in DEMO mode as long as you wish. The DEMO mode will include a DEMO watermark on the HDMI/DVI outputs or a moving Softron logo on all outputs through video cards. This also means that you can use a DEMO version to build playlists, save them and re-use them.

Once you’ve tested OnTheAir Video Express thoroughly and would like to purchase a copy, just contact your nearest re-seller or go the Softron online store. You will receive a Serial number or a dongle (option).

3.3 Licensing OnTheAir Video Express

All Softron applications can be licensed using either Serial Numbers (by default) or Dongles (optional). Serial Numbers can be sent quickly (you will receive them by e-mail) and are also stored in our database should they be lost. You will only need to deactivate your software if you want to move it to another computer, reinstall your operating system, replace critical hardware or replace your system drive. Internet access is required to activate and de-activate serial licenses.

You will not need to de-activate the serial license for software updates .

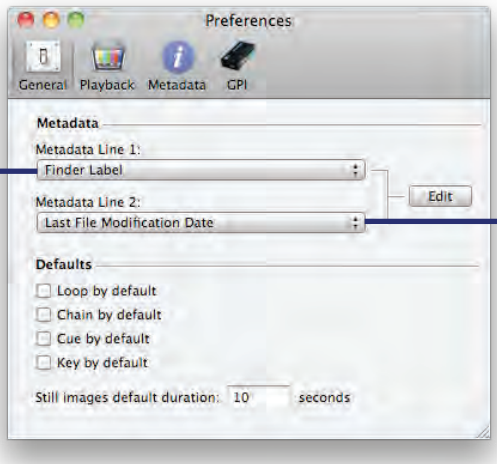
For more Information on the Software Licensing, download the “Application Licensing Explained” document available from the Document download page of the website:
http://www.softron.tv/support/download_docs.html

Setting up OnTheAir Video Express 4

▶ 4.1 "General" preferences

The first tab of the OnTheAir Video Express preferences window is the General preferences.

▶ 4.1.1 Metadata



Each clip in the OnTheAir Video Express playlist can show 3 lines of Information.

- The first line of information is dedicated to the name of the file.
- The second and third lines of this cell can be customized in Metadata Line 1 and
- Metadata Line 2.

When you click on the popup menu, you can see a list of available Metadata lines by default, you will see:

- Finder Label : Using the Apple operating system you can customize features in your finder to assign colors and label names, these options are located in your finder preferences.
- Last File Modification Date : The Date & Time of the last modification to your file.
- Display Name : A QuickTime Metadata line, this permits you to create a different naming convention and it is easily modifiable with QuickTime Pro. OnTheAir Video Express can retrieve this information and show it here.
- Absolute File Path: the full path to access the media file.
- Frames Per Seconds : the frames per seconds of your media file.

You can customize Metadata further by selecting “Edit”, this will bring you to the Metadata tab of the OnTheAir Video Express preferences. Check the Metadata tab section for more Info on how to edit the Metadata List.

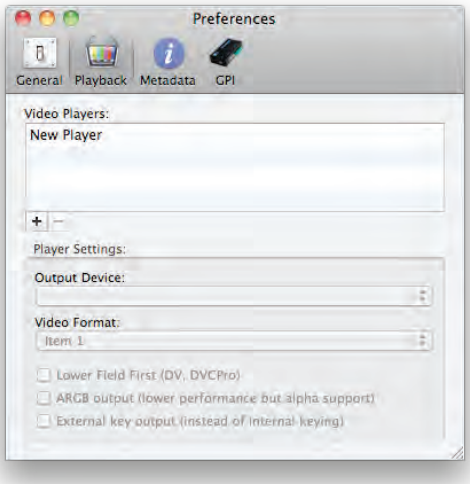
▶ 4.1.2 Defaults

Set the way playlists are created by default. If you check the “Loop by default” option, all playlist you create will have the Loop option enabled. For more Information on all these modes (Loop, Chain, Cue, Key), see the playlist chapter.

You can also set the default duration for Still Images that you drop in a playlist. This is a default value, but you can also modify the duration of a still image if you ctrl+click on it in a playlist and select “Set Image Duration...”

▶ 4.2 “Playback” preferences

The second tab of the OnTheAir Video Express preferences window is the Playback preferences where you can configure different players. A player is a specified and configured output. If your computer has multiple video outputs, you can create multiple players each with a different output, and with its own settings.



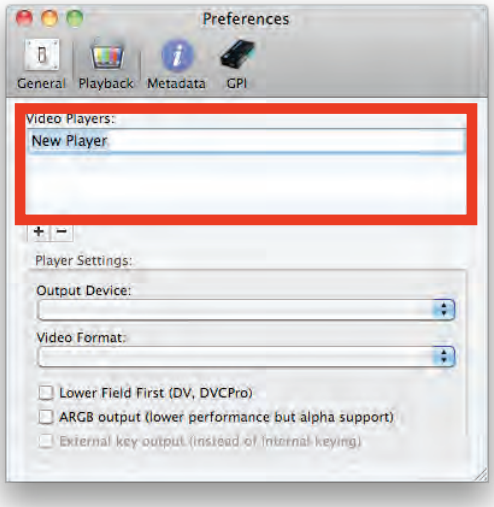
We do not recommend multiple simultaneous outputs with OnTheAir Video Express. OnTheAir Video Express uses QuickTime playback resources, and although they are very powerful and complete they can not handle multiple streams of video compression at the high level of output expected from broadcasting professionals. OnTheAir Video Express is only recommended for a single playout stream per system. For multiple playout options check out our OnTheAir Node and OnTheAir Video PCI software at www.softron.tv

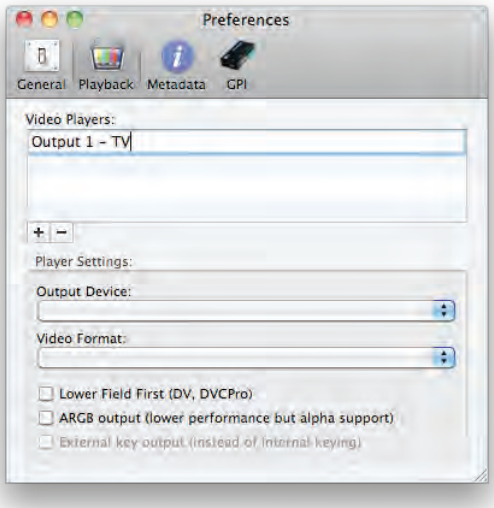
The lower part of the user interface with check-boxes for Lower field, ARGB, and external Keying is available with specific hardware such as Keying enabled PCIe Video Cards and hardware with Alpha Support.

▶ 4.2.1 Renaming a Player

When you start the application, you will see a “New Player” available for configuration.

To rename a “Player”, double-click on the name and type the desired name for your player.



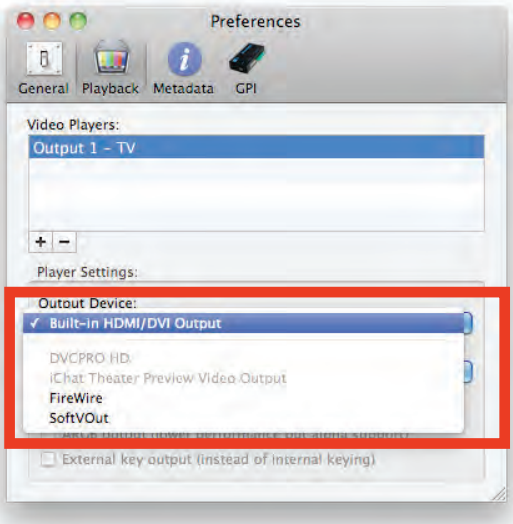


After having renamed your “Player”, you can modify its settings. Depending on the type of video output you will be using, you will have different potential configurations. With OnTheAir Video Express you can use different outputs these are a few common ones:

- The LCD screen of your laptop/iMac
- The DVI or Mini Display Port output of your Mac
- The built-in HDMI output of your Mac mini
- A FireWire converter connected to a FireWire port of your Mac
- A Video card (AJA, Blackmagic, Matrox, MOTU, ...)
- Any video output that is supported by QuickTime

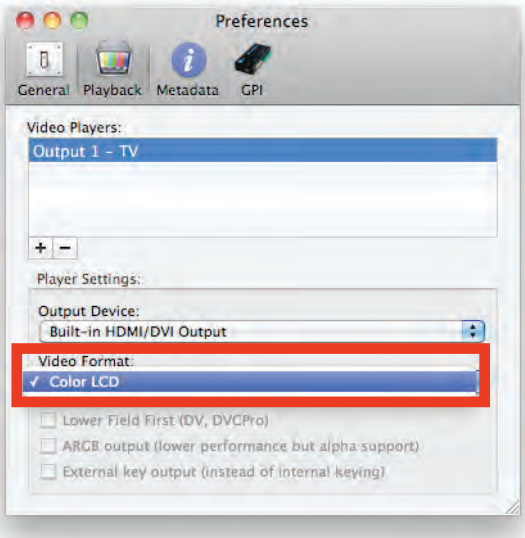
▶ 4.2.2 Setting up to output on the main LCD screen of your Mac

To be able to change settings, you must first select a player in the list. Then click on the “Output Device” popup menu, and this window will appear:



Select “Built-in HDMI/DVI Output”

Then in the “Video Format” po-pup window select the screen you want to output your signal to.



If you only have one screen connected to your Mac or if you are using a MacBook, MacBook Pro or iMac, you will be able to choose only one output device and monitor. The name of the monitor can vary depending on brand, etc. The screen shot above has been taken from a MacBook Pro.

As soon as you select your main screen as the output format for OnTheAir Video Express, your screen will turn black, with a DEMO watermark if you are in DEMO mode. To exit this mode and return to the application, press the Escape key.

Once you have exited the black screen, you can start using OnTheAir Video Express. Create a new playlist, drag and drop clips in it, and play them. You will notice in single monitor mode that as soon as you hit the play button, the user interface is hidden and you will only see the video output you can still interact with the playlist and stop/pause/play the playlist but you cannot modify it.

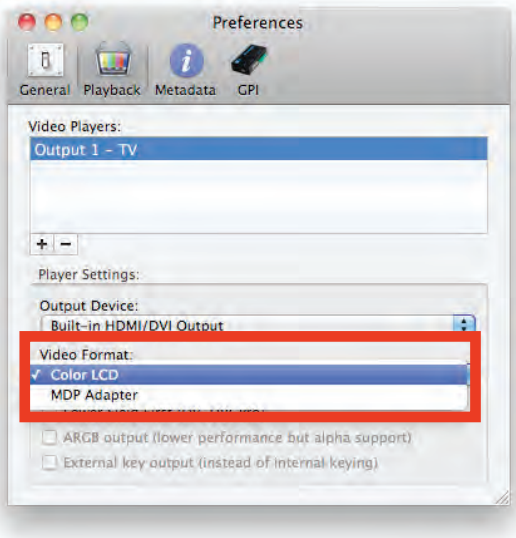
To retrieve full control of OnTheAir Video Express and return to your user screen, hit the Escape key.

Using OnTheAir Video Express with only one screen connected can be useful in hotels, expositions, museums, etc... Or anywhere a single playlist may run for the whole day only on one screen. But if you wish to modify the playlist during playout you will need two monitors.

For Mac mini users: if you only have one monitor connected to the built-in HDMI output, but no Monitor connected to the Mini Display Port output, you may experience some performance issues because the Mac OS disables Open GL. To keep Open GL active, follow the guidelines here:
http://softron.zendesk.com/entries/189221-how-do-i-keep-the-dvi-or-mini-displayport-output-active

▶ 4.2.3 Output to a second monitor or a projector using DVI

If you have a second monitor connected to your Mac or a projector, you should see it in the list of the Video Format pop-up menu :



The names may differ depending on the brand of the Monitors/Projectors connected.

Select the monitor/projector you want to show your videos on.

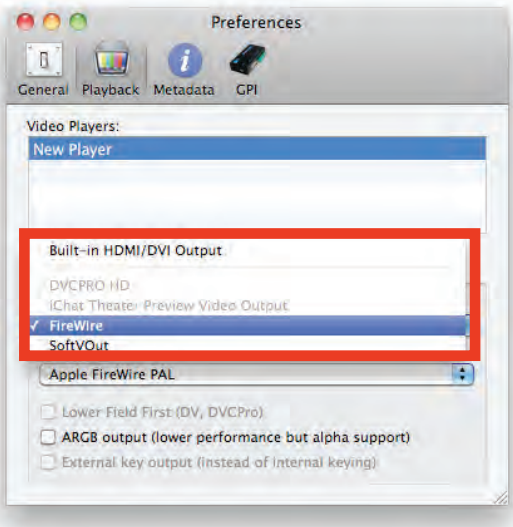
When you have two Monitor/Projectors, you will have a control monitor and a display monitor this allows you to see the OnTheAir Video Express user interface when playing videos, modify playlists, and creating new ones.

NOTE: Remember to press the “Escape” key if you have not selected the correct monitor for your output.

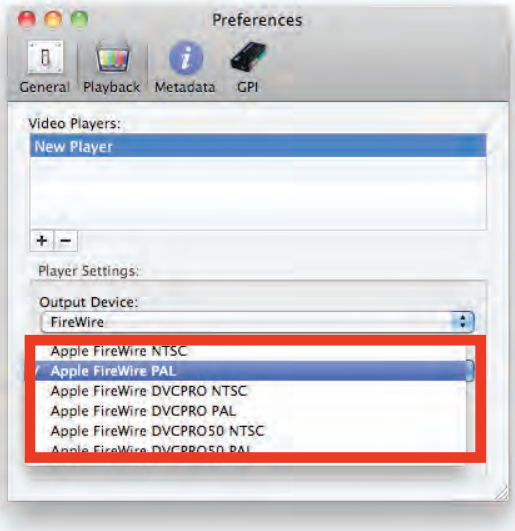
▶ 4.2.4 Output to a FireWire Converter / Camera

OnTheAir Video Express can also output to a FireWire Converter (such as the ones from Canopus) or to a Camera/Deck, via FireWire connection. First make sure that you device is properly connected to your computer.

Then select the Player you want to use in the list, then in “Player Settings”, choose “FireWire”:



Then in the Video Format popup menu, select the Video format you are using (PAL, NTSC, ...):



▶ 4.2.5 Output to a Video Card

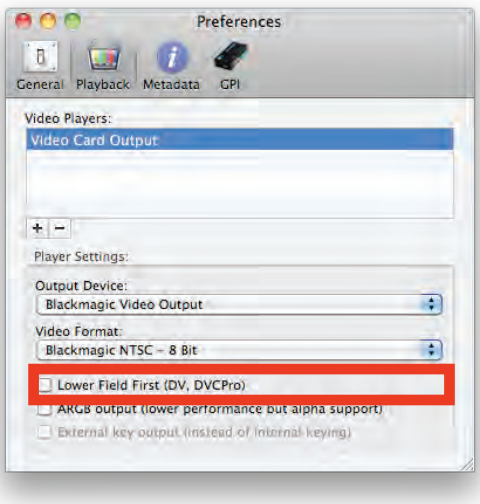
With OnTheAir Video Express you can also output to a Video card from third party manufacturers like AJA, Blackmagic-Design, Matrox or MOTU.

To use a video card make sure that the card is properly installed and using the latest drivers. With a compatible video card installed you should be able to select it in the "Output Device" pop-up menu.

When you have selected the video card you want to use in the Output Device, you will be able to choose the video format you want to use. The available video formats will depend on 2 things:

- The video card you have installed
- and whether you have ARGB output enabled (see below)

▶ 4.2.6 Lower Field First (DV, DVCPro)

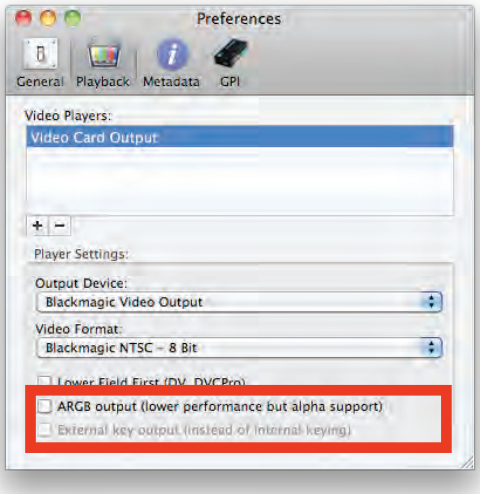


You should enable the Lower Field First option when you are outputting Codecs that have a Lower Field First such as DV or DVCPro Codecs to a Video card.

If you do not enable it when playing Lower Field Codecs then you will see a field inversion in the output.

Remember that all fields will be shifted and all clips will playout with lower field inversion. This means that you should not mix lower and higher field first Codecs in the same output.

▶ 4.2.7 ARGB and Keying modes



ARGB output is only available with some video cards. To find out about cards that can output in ARGB, visit this page on our site:
http://softron.zendesk.com/entries/303926-which-video-cards-can-you-use-to-key

You must enable ARGB output if you want to play ARGB clips and key over an incoming video signal or output a Fill & Key signal.

When you enable the ARGB mode the Video format switches to RGB output of the video board. Note that RGB output uses twice as much bandwidth and data as YUV output, make sure your computer can sustain this mode.

Internal Keying
When you enable ARGB output, the Keying is done internally on the card. This means that you enter a video signal in the input of the video card and that OnTheAir Video Express will overlay an alpha layer on top of the RGB values from the incoming video signal.

External Keying
Some cards, in addition to internal Keying, allow for External Keying, where the Keying is not done by OnTheAir Video Express, but by an external device such as a Video Mixer with Keying capability.

When you enable External Keying, instead of keying over an incoming signal, OnTheAir Video Express will instead output the Fill&Key signals and use the 2 different output of the video card so it sends

- On one output the Fill = the video signal complete with colors, etc
- On the other output the Key = a Black/White/Grey signal that will tell the external device which part of the signal must be transparent and which ones are opaque. This is the translation of the Alpha Channel that is present in the ARGB clips.

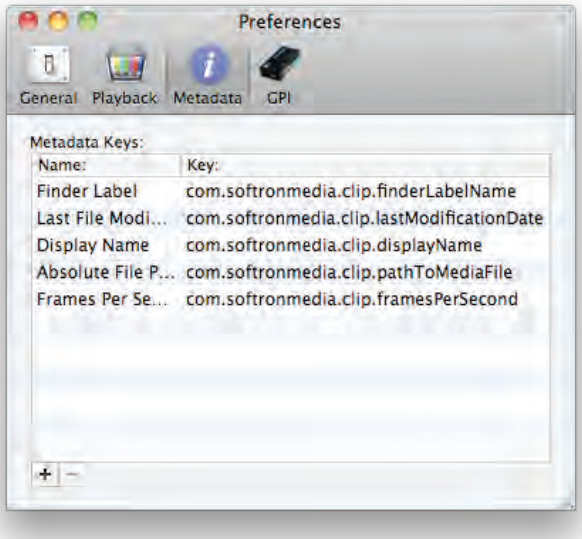
The most common Codecs for ARGB clips are the Animation codec with Alpha Channel, and the Apple ProRes 4444.

▶ 4.3 “Metadata” preferences

We have seen in the General preferences that you can display some Information about the clips in the playlists information lines. The list of Metadata available in the popup list in that menu is populated from this tab. You can add, delete and modify this list here.

This Metadata tab works as all Metadata and XML values as you need to give it:

- A Name = the name that the user will see in the popup menu
- A Value = this is a unique value that is used retrieve the appropriate value from the Metadata



You can add or delete Metadata Keys by clicking on the + and – icons at the bottom of the list, and you can rename them simply by double-clicking on any of the lines.

Make sure that you enter a correct value for the Key. OnTheAir Video Express will search the QuickTime Metadata file for the presence of this value, if it is not exactly the same, OnTheAir Video Express will not find it.

Metadata with MovieRecorder

Some applications can write Metadata Information in the QuickTime files. MovieRecorder (Pro Option) by Softron Media is one of these applications.

▶ 4.4 "GPI" preferences

OnTheAir Video Express can be controlled by an external device using a GPI. It can also control an external device using a GPI.

GPI stands for General Purpose Interface. It is a simple on/off protocol that is used with many devices including video mixers.

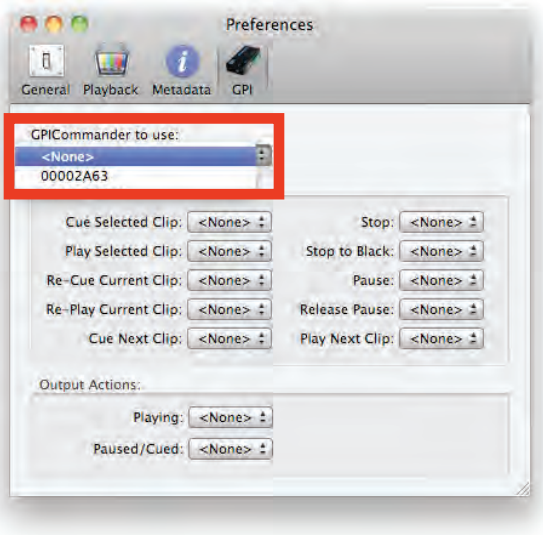
No option is required for OnTheAir Video Express. However you will need a GPI Commander to convert a GPI signal to USB. Do not forget to purchase it from our online store if you need it.

Review the GPI Commander user manual to see how to connect a GPI Commander. OnTheAir Video Express is already pre-programmed to function with the GPI Commander and can be configured in minutes, there is no need for a bridge application or other software. Just connect your external device to the GPI Commander box, and connect the GPI Commander box to your computer, that's it.

▶ 4.4.1 Select the GPI Commander to use

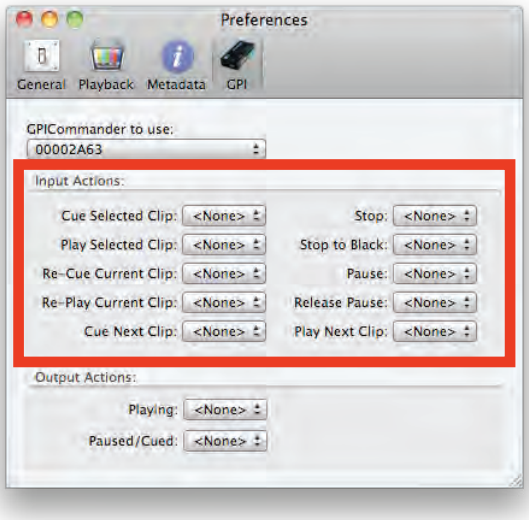
You can connect multiple GPI Commander on your Mac (if for example, you need more than the 24 inputs / 8 outputs of a single GPI Commander). The first thing you need to do is select which GPI Commander you want to use.

When you click on the popup menu below "GPI Commander to use", you will get a list with at least one number. This is the serial number of your GPI Commander.

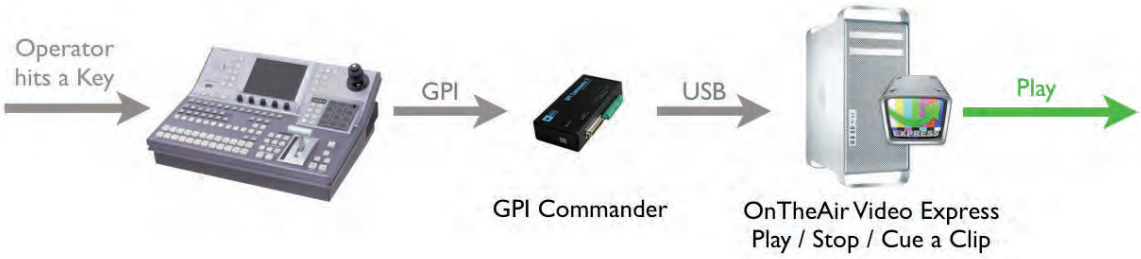


▶ 4.4.2 GPI Input Actions

Once you have selected the GPI Commander modify the Input Actions settings that you want to use to control OnTheAir Video Express from an external device.



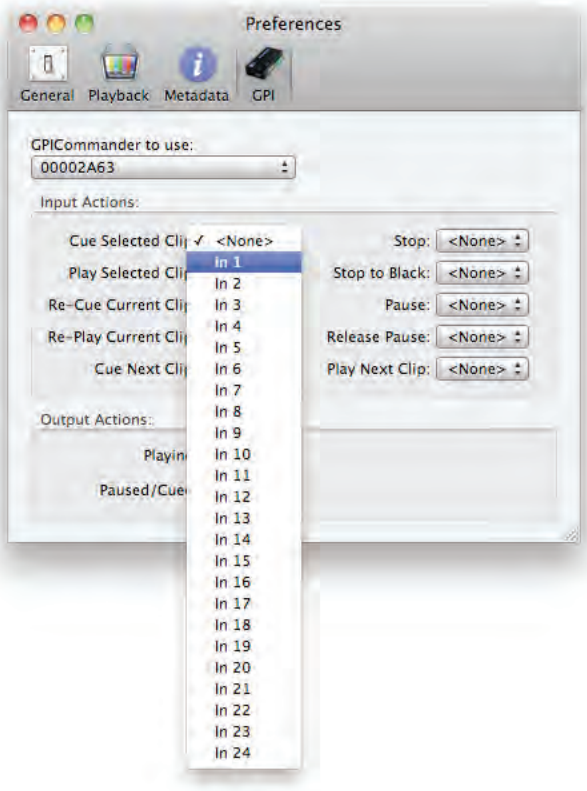
Below you will find a diagram showing what type of action is achieved with GPI input in OnTheAir Video Express



In the Input Actions window, you will see different lines, each with a pop-up menu. By default the value of these popup menu is set to <None>.

Let's say you want OnTheAir Video Express to cue the selected clip when you press a key on your video mixer. First make sure that when you pressed the desired key on your video mixer, it triggers for example the GPI 1. Then Select "Input 1" from the popup menu in front of Cue Selected Clip.

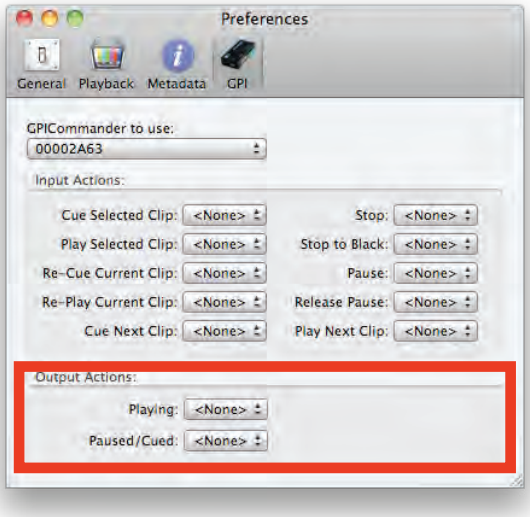
Now go back in a playlist, select a clip, and hit the key on your video mixer, the clip should be cued in your playlist.



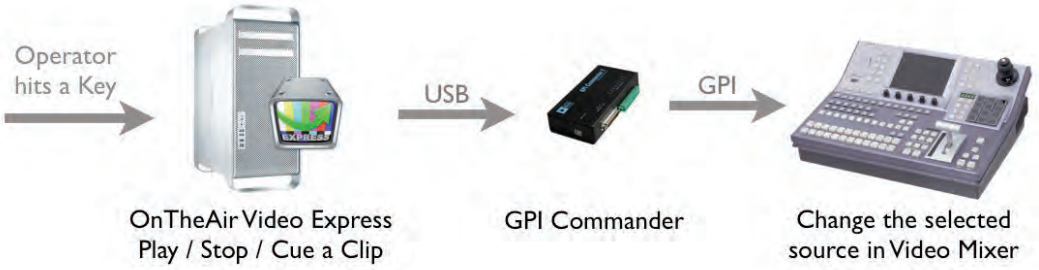
Do NOT select the same input for multiple “Actions”, like selecting Input 1 for “Play Selected clip”, and “Stop” actions as this will lead to unexpected behavior.

▶ 4.4.3 GPI Output Actions

Once you have selected the GPI Commander to use, modify the Output Actions settings if you want to control an external device from OnTheAir Video Express.



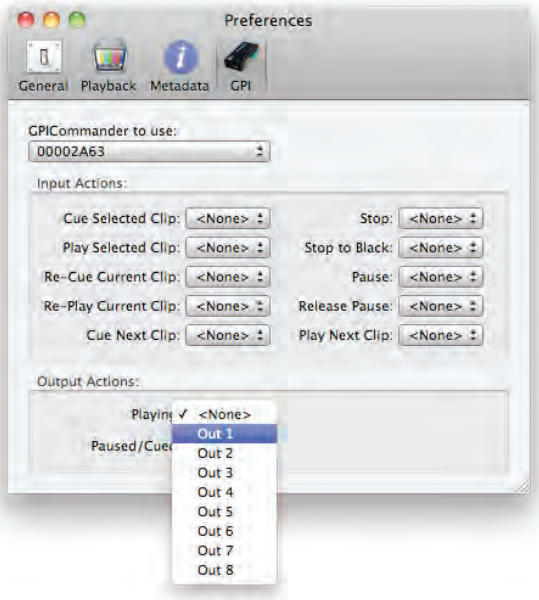
Below you will find a diagram showing what type of action is achieved with GPI output in OnTheAir Video Express



In the Output Actions window, you will see different lines, with each a popup menu. By default the value of these popup menu is set to <None>.

Let’s say you want OnTheAir Video Express to send put the status of Output 1 to on when playing so it changes the selected source in the Video Mixer.

Click on the popup menu in front of “Playing” and select “Out 1”. Now if your Video Mixer is properly configured and connected to GPI Commander, the source will be modified when you play a clip.



Using OnTheAir Video Express

III

In this third part, now that you've learned how to setup OnTheAir Video Express, we will go more into details on how to use OnTheAir Video Express.

Overview of the user interface

5

5.1 Playlist

1 Time Indicators
Will give you information about the Elapsed, duration and remaining time of the current clip or playlist.

2 Player Selection, Playback Controls, Playback Modes

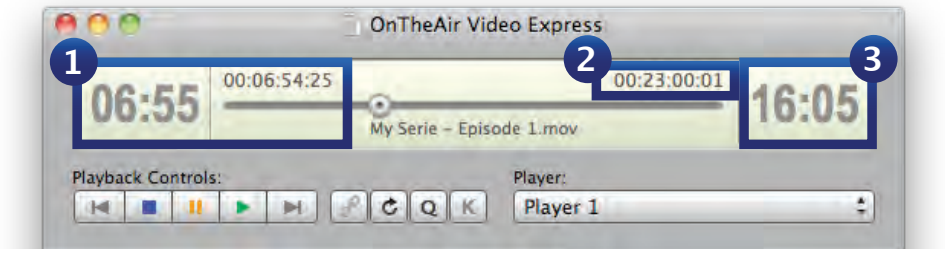
- Playback Controls : Skip to previous, stop, pause, play, skip to next.
- Playback Modes: Enable/disable the Chain/Loop/Cue
- Player selection: Select the desired Player (to add more players go in preferences)

3 Playlist
The list of clips to playout with information such as Clip Thumbnail, Clip Name, Last modification date, Duration, Languages, Clip End Behavior.

4 Items Selected
Number and Duration of selected items

5.1.1 Playlist Time Indicators

The Time Indicators provide information about the time (Elapsed Time, Duration, Remaining Time) for the entire playlist or the clip depending on wether you are in chain mode or not



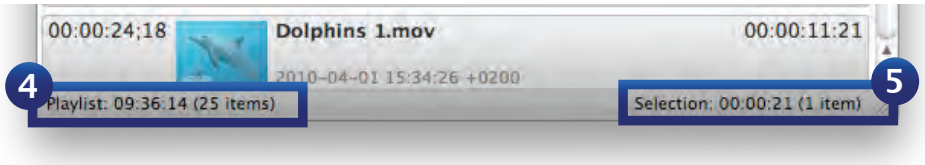
1. Both times (the one in big and the small one) indicate the elapsed time: one shows it in big with only minutes and seconds, and the other one in small show hh:mm:ss:ff.
   - If the playlist is in Chain mode, it shows the elapsed time since the beginning of the playlist.
   - If the playlist is NOT in Chain mode, it shows the elapsed time since the beginning of the clip.

2. Indicates the duration:
   - If the playlist is in Chain mode, it shows the duration of the playlist.
   - If the playlist is NOT in Chain mode, it shows the duration of the clip.

3. Indicates the remaining time:
   - If the playlist is in Chain mode, it shows the remaining time until the end of the playlist.
   - If the playlist is NOT in Chain mode, it shows the remaining time until the end of the clip.

The Big time indicators (remaining and elapsed) have a limit of 99 minutes and 59 seconds, above that they will show --:--

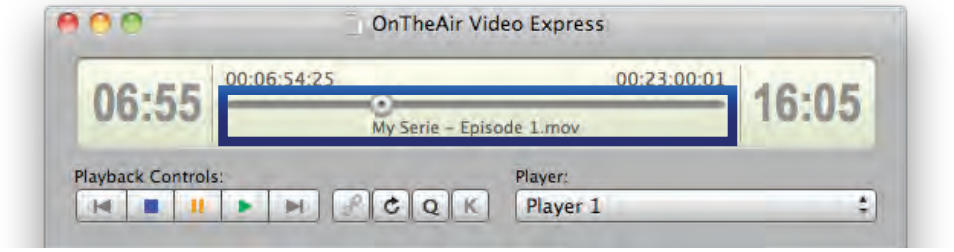
You can find more Time Indicators at the bottom of the playlist.



4. Indicates the total duration of the playlist and the number of items it has.

5. Indicates the duration of the selected clip(s) and the number of items selected. Note that you can select more than one item and it will show their added duration.

▶ 5.1.2 Scrub bar and name of playing clip



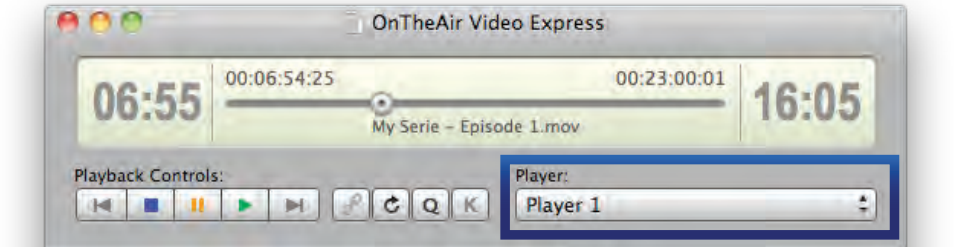
You can use the scrub bar to navigate in the playlist or the clip:

- If the playlist is in Chain mode, when using the scrub bar, you go through the whole playlist.
- If the playlist is NOT in Chain mode, you will scrub only within the playing clip.

Manipulating the scrub bar will also be visible on playout and should be used carefully.

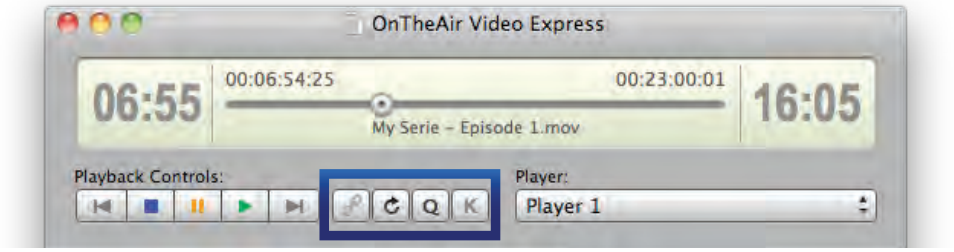
Additionally, below the scrub bar the name of the currently playing clip is shown.

▶ 5.1.3 Player Selection



We have seen earlier in preferences that we can add multiple players for one OnTheAir Video Express application and thus have multiple output configurations on one Mac (with the limitations explained earlier). The first thing you want to do before playing out is to select the correct player.

▶ 5.1.4 Playback Settings (Chain, Loop, Queue, Key)



Here are the different play modes :

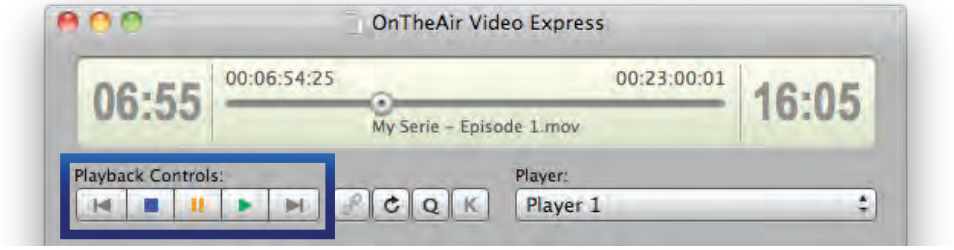
« **Chain** » : in this mode, the clips will play one after the other in the order of the playlist. If unchecked, OnTheAir Video Express will stop after each clip. !! Important Note : in Chain mode the playlist can not be edited when playing, you can still edit another playlist, but not the playing one. You can not enable or disable the chain mode when the playlist is playing.

« **Loop** » : at the end of the playlist, OnTheAir Video Express will go back to the beginning and replay the playlist. Note that due to the fact we are using QuickTime for playout without buffering, you may experience freeze frames when the playlist Loops.

« **Cue** » : when double-clicking on a clip or when selecting a clip and pressing on the space bar, or clicking on "Play", instead of playing immediately, the clip will be paused on the first frame. When pressing the space bar again (or clicking on "Play"), the clip will start to play until the end and hold the last frame for the duration set in preferences, then hold the first frame of the next clip. This is very useful for News and live shows when the subject is ready on the first frame. It should be used in combination with "Chain Mode": when "Chain Mode" is enabled, the clips will play one after another; when disabled, OnTheAir Video Express will stop after each clip and select the next one, so that it is ready to be cued.

« **Key**» This option will only be available if you have enabled ARGB output in the playback preferences for this "Player" and that you have a video card that supports Keying. You should enable the Key mode if you want to overlay graphics on top of Video. If it is disabled, you will not see the background video. Note that when you switch it on and off, there may be a few dropped frames while the Video card switches modes.

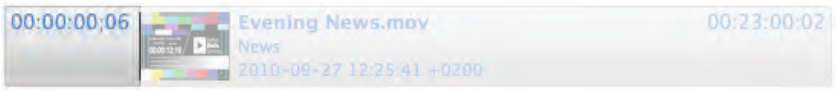
▶ 5.1.5 Playback Controls



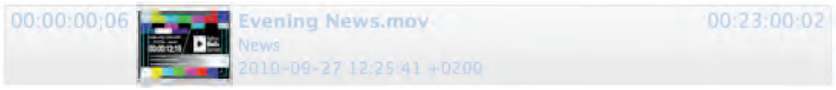
Here are convenient playback buttons you can use to start playing the selected clip, pause, stop, skip to next/previous clip.

▶ 5.1.6 Playlist Clip Cells

A playlist is a list of videos to be played in succession.
The first column indicates the relative start time of each clip. It will also show the eventual In and out points.

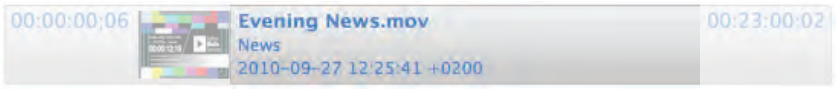


The second column shows a thumbnail of the clip.

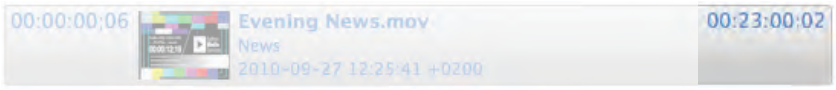


The third column has 3 lines:

- The Name of the file (or the QuickTime Title)
- The Metadata Line 1, configured in preferences
- The Metadata Line 2, configured in preferences



The forth column shows only the duration of the clip, considering the eventual in/out points.



▶ 5.1.7 Color Codes

- In Mac OS, you can set Finder Labels to your clips. In OnTheAir Video Express playlists, the clips text will then be tinted in the color of the finder Label.
- A clip tinted in *blue* indicates it is selected.
- A clip tinted in *green* (there will also be a green triangle on the Thumbnail) indicates that the clip is now playing.
- A clip tinted in *red* (there will also be a red cross on the thumbnail) indicates that the clip is offline. Perhaps the clip (and/or the folder in which it was) has been moved or renamed. Be careful when you move, rename or delete Files and/or folders!

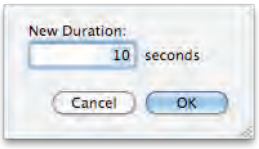
▶ 5.1.8 Operations in playlists

Within the playlists you can perform several operations :

- Inserting and ordering the clips by *drag-and-drop*. With drag-and-drop, the clips are inserted at the top of the clip where your pointer is. You can organize the clips, even in a playing playlist as long as the clip is not locked.
- *Copy-paste* one or more clips: Select one or more clips in a playlist then press “command + C” or select “Edit > Copy”, then in another playlist, or the same playlist, select a clip and then press “command + V” or select “Edit > Paste”. The copied clips will be pasted at the top of the selected clip. You can also Copy-Paste one or more clips by holding the “option” key while moving a clip within a playlist.
- “control” + “click” or Right-click on one clip and select “Reveal in finder” to see where the file is located on your disk.
- “control” + “click” or Right-click on one clip and select “Replace” to replace the current clip with another one (a new window will open)

▶ 5.1.9 About Still images in Playlist

In OnTheAir Video Express preferences you can set the default duration that a still image will play for. If you want to play it longer or shorter than this duration, you can press “control” + “click” or right-click on it in the playlist, and select “Set Image Duration”. A window will open that allows you to set a new duration in seconds.



▶ 5.2 Inspector

The Inspector enables you to preview the clips and trim them. To show it, press command + “i” or select the menu Tools > Show Clip Inspector.

▶ 5.2.1 In/Out

1 Movie Time Indicators

- « *Current Position* » : the timecode (start at 00:00:00:00) at the position where the play-head is located
- « *Duration* » : the Clip Duration (considering the in/out points)

2 Preview Window

Video Preview of the Movie

3 Timeline

Scrub/Play into the Movie (you can use standard JKL and arrows shortcuts to move the playhead)

4 In/Out Points

- « *In Point* » : the timecode where the In Point is set. Press “i” to set the in point to the current position of the playhead.
- « *Out Point* » : the timecode where the Out Point is set. Press “o” to set the out point to the current position of the playhead.

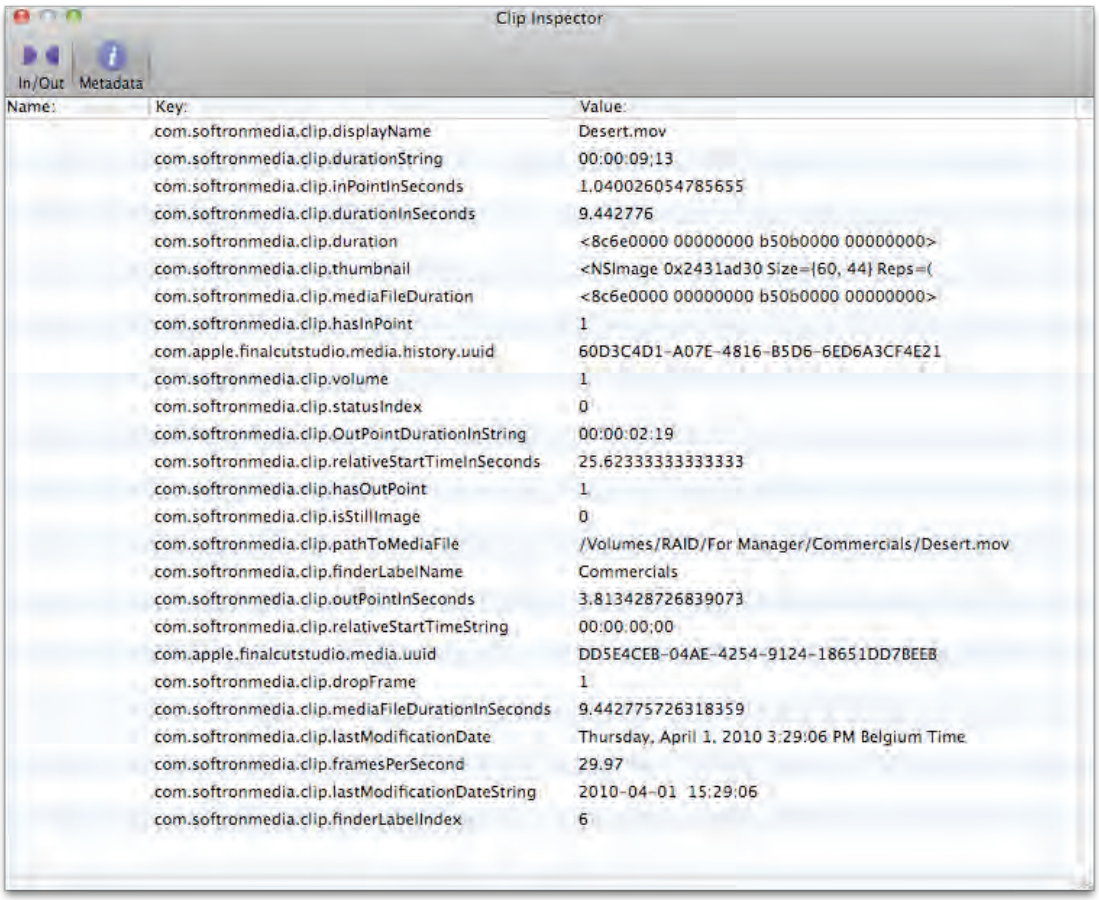
To set in and out points

Go to a position in the timeline, and

- Use the “i” and “o” shortcuts to set the in/out point to the current position of the playhead.
- Click on Mark, Go, Clear button
- Manually type the Timecode In/Out

Beware that these in/out settings are set only for the selected clip in this playlist. It will not change the in and out points of all the occurrences. If you want to do that, you’ll have to re-export the clip or copy-paste it from one playlist to another.

5.2.2 Metadata



The Metadata Tab will show you all the Metadata available in your QuickTime file. You can use this as a convenient guide to setup the Metadata Lines in OnTheAir Video Express preferences.

Menus Overview

6

The Menu Bar for OnTheAir Video Express has quite a few very useful features that can assist you with your operations. The first thing to note is that some Menu Bar Options are part of your operating system and some are part of the software the following section will discuss the menu bar.

6.1 Menu File

- New Playlist: Creates a new playlist.
- Open Playlist : Opens an existing playlist.
- Open Recent Playlist : Opens a list with the 5 last opened playlists among which you will be able to choose.
- Check For Missing Clips: will check if all the clips that are in the playlist are still present on your disk, or if some Offline files became online again. Remember to do this check regularly as if a file is deleted from your disk, it won't be shown offline in the playlist unless you've "Checked for Missing Clips".
- Close Playlist: Closes the current playlist.
- Save Playlist: Saves the current playlist.
- Save Playlist As : Saves the playlist with another name or at another place.

6.2 Menu Edit

- Undo : Undo an action.
- Redo : Redo an action after an Undo.
- Cut : Cut a clip from the playlist (removes it from the playlist and place it in the clip-board).
- Copy : Copies the clip (leaves it in the playlist and place it in the clip-board).
- Paste : Pastes the clip from the Clip-Board. Place it on the top of the selected clip.
- Delete : Erases the selected clip in the playlist.
- Select All : Selects all the clips in the same playlist.

6.3 Menu Window

- Minimize the current Playlist window and place it in the Dock.
- Zoom
- Show Clip Inspector: Shows the Clip Inspector window
- Bring All To front : Shows all the Playlists that were hidden by other Applications.
- At the bottom of this menu, you can also see all the opened Playlists. You can select and show them from here.

6.4 Menu Help

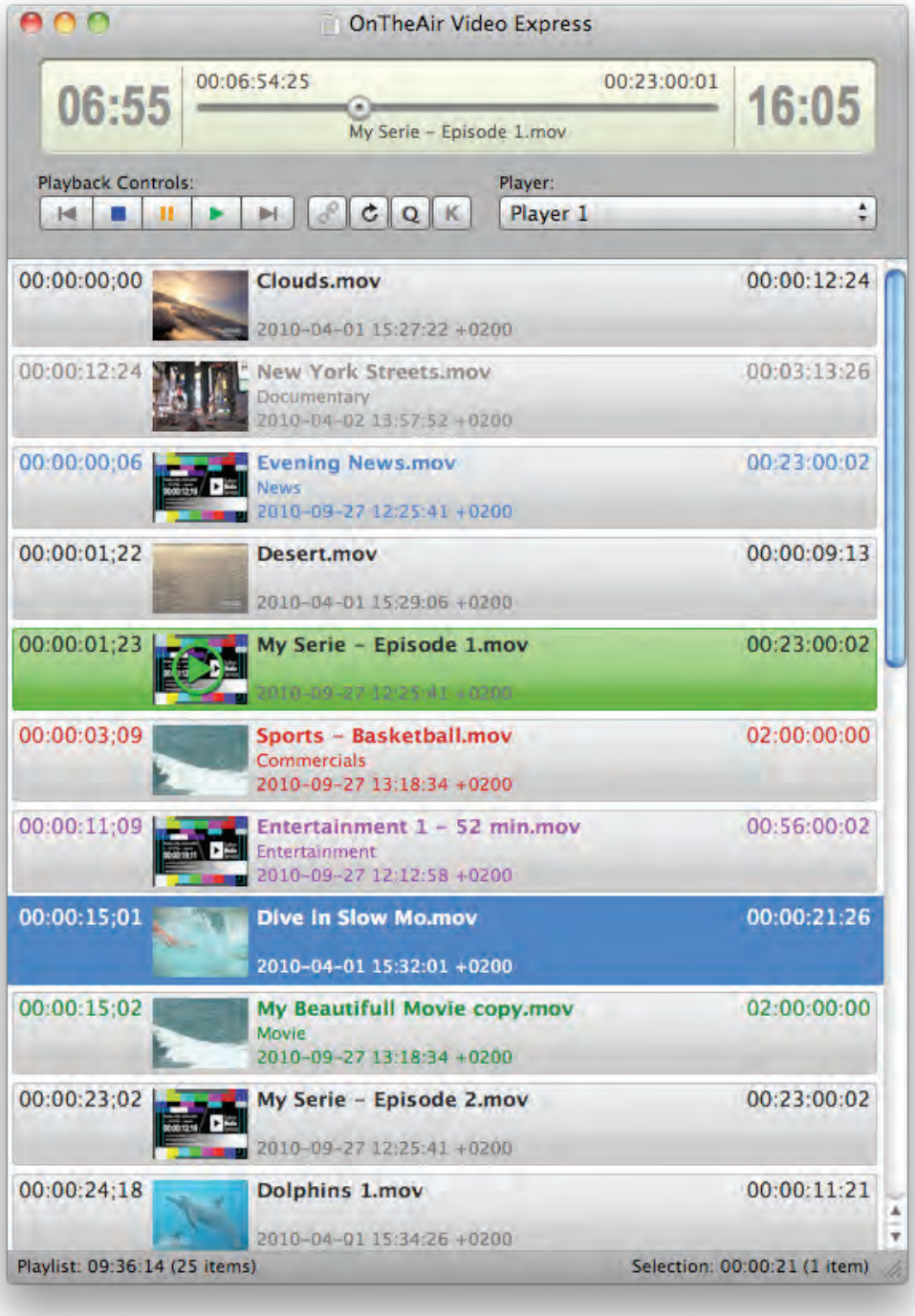
- Search: will search in OnTheAir Video Express menus and Help topics for the Mac OS
- OnTheAir Video Express Help : Opens the OnTheAir Video Express Manual.

How to create a playlist ?

7

▶ 7.1 Basics

A playlist is a a compilation of clip data stored on your disk as a vpls document. The file is written in XML format. The User Interface will present a playlist as seen below:



▶ 7.2 Creating a playlist manually

Creating playlists is relatively simple. Simply by using the drag-and-drop feature in OSX you can add and copy between the finder and a playlist, or between two playlists. The advantage of drag-and-dropping clips between two playlists is that the clip settings will also be kept.

To create a new playlist, choose File > New Playlist or press + N. To place the clips you want where you want them, you have several options:

- Next to the playlist window, open a finder window (or another playlist window). From this window, find the clips that you want to use. Select a clip (or many clips), hold the click on it and move it in the playlist window, then release the mouse button when it is at the place you want it to be. This new clip will go at the top of the selected clip in the playlist where you dropped it.

- Open two playlists and select one or more clips, then press + C or choose "Edit > Copy". Then select the playlist in which you want to copy these files, and select the clip on the top of which you want to place them. Then press + V or choose "Edit > Paste".

- You can select multiple clips by holding down the Apple key and you can select consecutive clips by holding the shift key.
- Once a playlist is opened, and if one of the files becomes unavailable (deleted from the disk or not valid anymore), it will be shown as offline, you have to go in the menu File > Check For Missing Clips to force OnTheAir Video Express to check if all files are still available.

▶ 7.3 Creating a playlist in XML : Third party integration

The Easiest way to see the XML architecture of an OnTheAir Video Express playlist is to create a playlist, save it, right-click on the playlist file and choose in the menu "Open With..." Then choose a text editor like Text Edit or Text Wrangler. Many lines of information are referenced in the XML, if you create playlists manually or through a database or traffic system all you need to do is generate a file that matches the architecture of the playlist file.

Additional Information

IV

Troubleshooting

8

For the latest troubleshooting information, you should check the Knowledge Base.

http://softron.zendesk.com/forums/266406-playout-general-tips-tricks
http://softron.zendesk.com/forums/176673-ontheair-video-express

The output Quality doesn't look as good as it should.

http://softron.zendesk.com/entries/246333-troubleshooting-the-video-output-quality-doesn-t-look-good-field-inversion

The application is in DEMO mode, even if "i" activated it.
Download the Application Licensing document and/or check these Knowledge base articles:
http://softron.zendesk.com/forums/178563-de-activations-and-dongles

Overview of Softron playout products

9

9.1 About Softron Media Services Playout Solutions

Softron Media Services has over 25 years of experience in developing software for Mac based systems. The focus of the software has been to provide professional broadcasting Ingest and Playout Solutions. Below are brief descriptions of our line of playout software for further information you can visit this page on our website: http://www.softron.tv/products/playout_specs.html

OnTheAir Video Express

OnTheAir Video Express is the "entry-level" playout application that can output any file QuickTime can read to any available Video output. If you can open a file with QuickTime, you can output it with OnTheAir Video Express. It can also read ARGB files. You can export a file in Animation codec or Apple ProRes 4444 and overlay that file on top of an incoming signal, making it a really efficient Character Generator with tools you already use like After Effects or Motion. OnTheAir Video Express is not a playout application recommended for 24/7 or for multiple playout streams on a single system.

OnTheAir Video DV

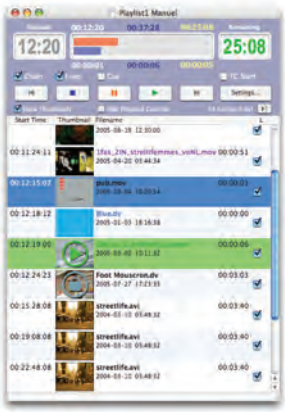
The FireWire Version of OnTheAir Video is called OnTheAir Video DV and works (only) with FireWire Converters. OnTheAir Video DV is a very light and efficient application that can run from a laptop, Mac mini, or most modern Macs with a FireWire input. With the multichannel video option, you can output up to 4 video signal from one computer (with additional FireWire card and the appropriate number for FireWire converter).It can be used to schedule in a 24/7 broadcast operation. Compared to OnTheAir Video PCI version, it does not have the Logo, HD, or multi language options. It only plays DV stream files it does not playout HDV.

OnTheAir Video

The PCI version of OnTheAir Video uses Softron's own playout engine, released in 2004 the playout engine has been used as a reliable broadcast quality playout server all over the world. It has proven to be highly reliable and is the ideal solution for broadcasters of 24/7 Schedules and live events.

OnTheAir Video can playout most QuickTime Codecs (provided they are i-frame) and

Offers advanced features that are provided optionally such as Logo overlay, High Definition, multilingual support, and Scheduling, ... For Live shows OnTheAir Video also has Cue mode, time code starts, midi and GPI trigger capabilities and can be used as a Motion Alpha Graphics playback channel with ARGB files.



▶ 9.2 OnTheAir Live, OnTheAir Manager and OnTheAir Server

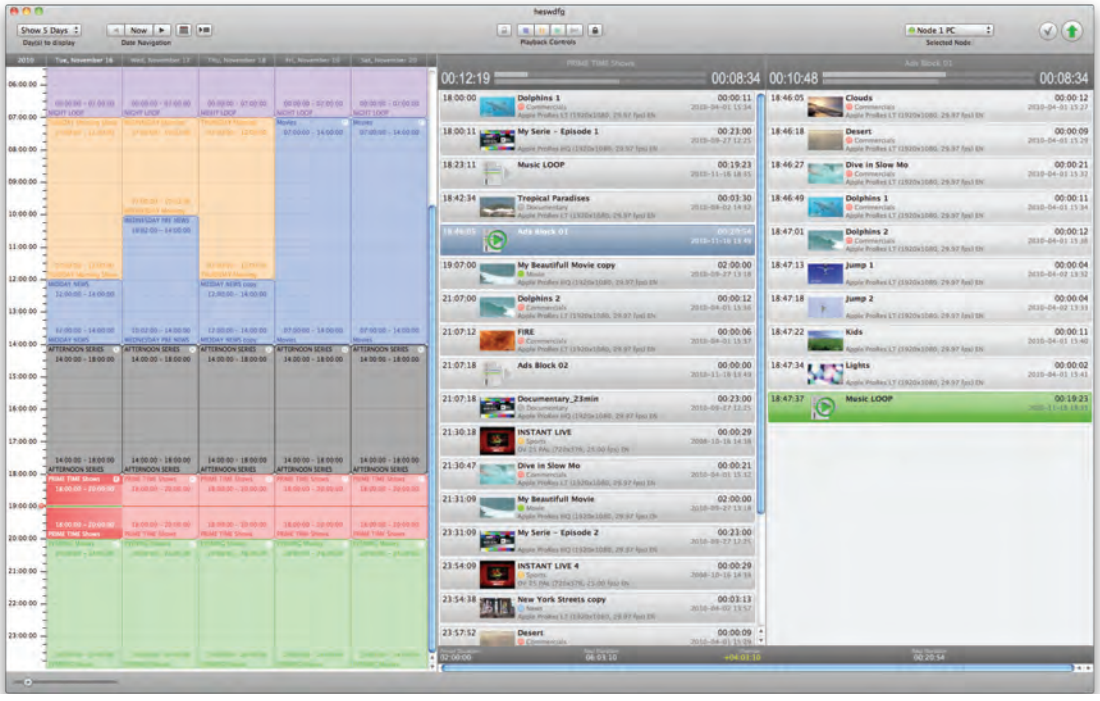
In 2010 Softron Media released its long awaited Client-Server playout solution. With this new set of applications one can convert a few MacPro's and a couple of MacBooks or Imacs into a complex and robust broadcasting operation. The software is completely scalable and allows for an amazing set of features that professional businesses demand. The server application is called OnTheAir Node and provides the playout power for the applications below:

OnTheAir Live

OnTheAir Live is a client application that works with Softron's suite of Client- Server Products. OnTheAir Live is included with OnTheAir Node which is the server playout application. As the name implies Live was created to be integrated in Live Broadcast operations and can be installed in as many stations as needed. Live can control a playout server from anywhere within the network and can assist in monitoring throughout the broadcasting facilities. OnTheAir Live also features A/B Roll which allows two independent playout channels to be controlled in a single playlist, providing a sophisticated cueing method that is unrivaled in the field.

OnTheAir Manager

OnTheAir Manager is a complete solution for broadcasters that need 24/7 playout, scheduling and a full set of automation options. OnTheAir Manager runs as a client application to OnTheAirNode and is capable of controlling and scheduling as many channels as the network can handle. A single seat of OnTheAir Manager can schedule GPI events,CG Inputs, Logo Insertion, Matrix Switch control, and Keying, for multiple channels across the network.



OnTheAir Server

OnTheAir Server is a server application that can link together multiple seats of OnTheAir Manager and Nodes. As a database store and a media server it acts as a gateway for nodes within the network. Large broadcasting operations can use OnTheAir Server to centralize and coordinate all scheduling and playback operations while maintaining flexibility and high level of control throughout your network. OnTheAir server completes the full line of playout solutions from Softron Media Services.

▶ 9.3 Different possible setups

Softron Media Services offers a variety of playout solutions in both standalone or single unit set-ups or Client-Server installations below are a few diagrams to assist you in researching current or future projects:

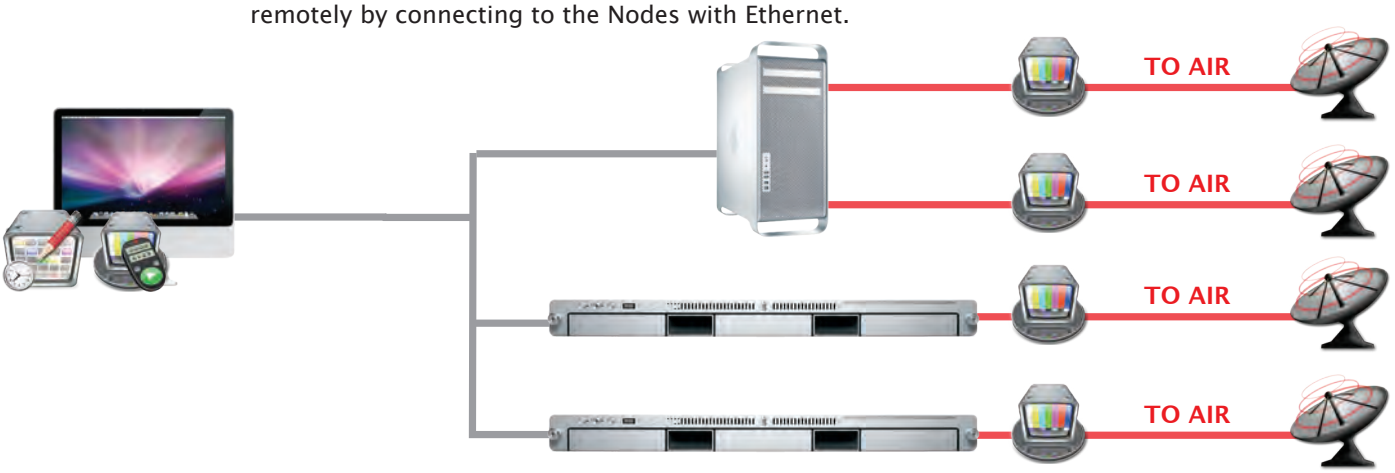
With OnTheAir Video or OnTheAir Video DV or OnTheAir Video Express :
One client controls one or 2 output but only local: you need to be on the computer to control it.

With OnTheAir Node + OnTheAir Manager (or OnTheAir Live) :
One client (OnTheAir Manager or OnTheAir Live) controls one output (OnTheAir Node) on the same computer.

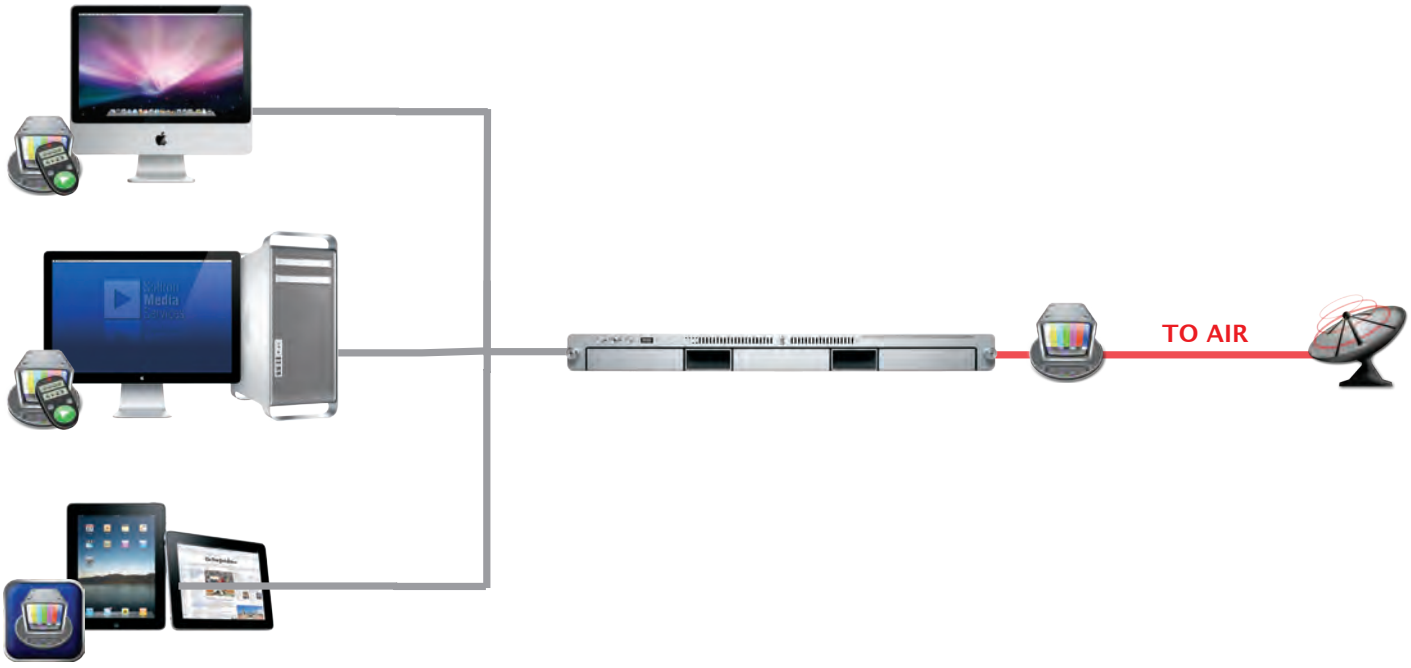
One client (OnTheAir Manager or OnTheAir Live) controls 2 output (OnTheAir Node) on the same computer.

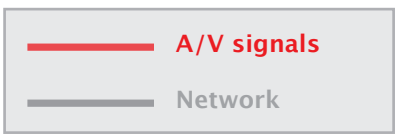
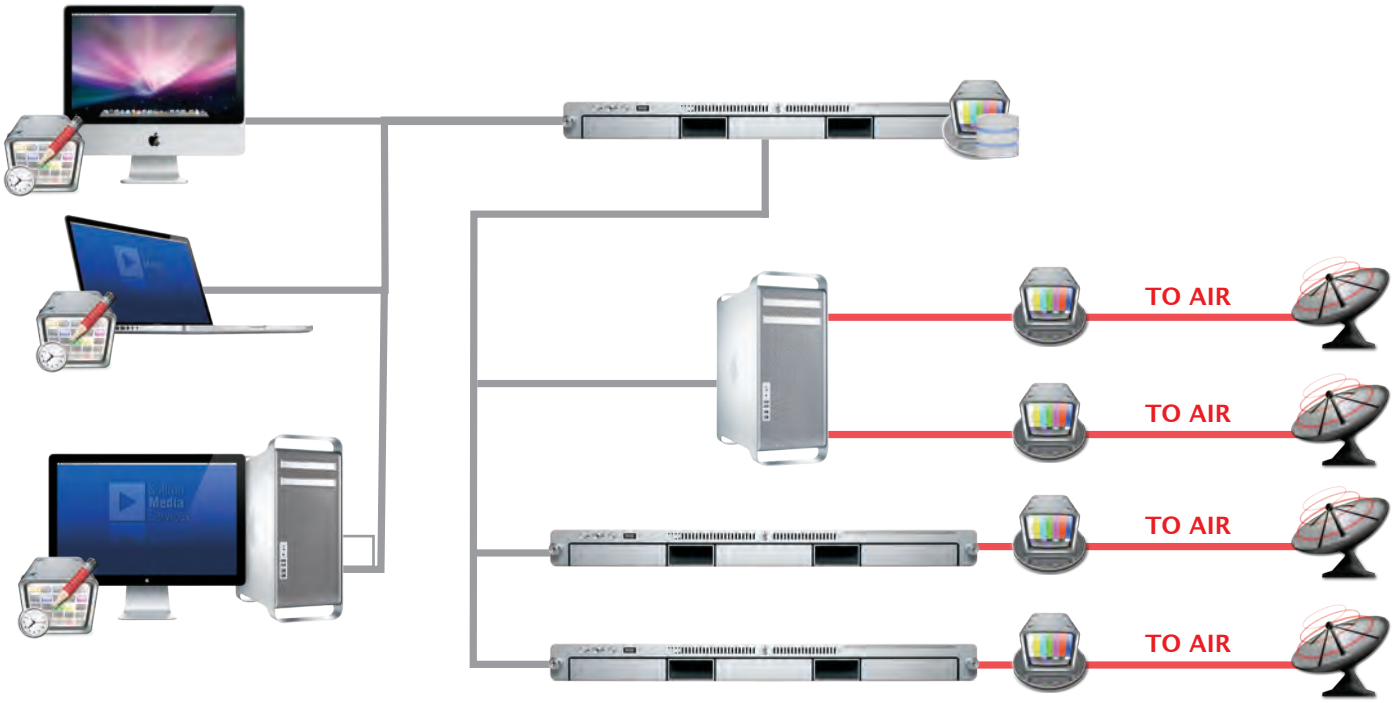
A/V signals
Network

One client (OnTheAir Manager or OnTheAir Live) control multiple output (OnTheAir Node) remotely by connecting to the Nodes with Ethernet.



One or multiple output (OnTheAir Node) can be controlled by multiple clients (only OnTheAir Live – for OnTheAir Manager you will need OnTheAir Server)





With OnTheAir Node + OnTheAir Server + OnTheAir Manager :
One and or multiple clients (OnTheAir Manager) control one and or multiple output (OnTheAir Node) by connecting to a Server (OnTheAir Server)